

Application No. 10/086,792
Amendment "A" dated June 22, 2005
Reply to Office Action mailed May 9, 2005

REMARKS

Applicants express appreciation for the interview granted to applicants' representative. At the interview proposed new independent claims were discussed and it was concluded that those claims appeared to define over the rejections of record, subject to review of the formal amendment and updating the prior art search. Applicants have accordingly presented the new independent claims as proposed, and have amended the dependent claims consistent with the new independent claims submitted. Amendments to the specification have also been made to correct minor typographical errors. Accordingly, entry of the amendments and reconsideration of the application is respectfully requested.

By this paper, new claims 47 – 49 have been presented, and claims 1 – 5, 22 and 24 – 46 have been canceled without prejudice. Thus, claims 6 – 21, 23 and 47 – 49 are pending and presented for reconsideration. Of those claims, claim 47 is an independent claim directed to applicants' method, and claim 48 is a corresponding independent claim directed to a computer program product. Claims 6 – 21, 23 and 49 depend from claims 47 and 48.

In the office action claims 6 – 21 and 23,¹ directed to the claimed method, were rejected under 35 U.S.C. § 112, second paragraph, as being unclear because the phrase "an act of" which appears in the claims was believed to be inappropriate by the Examiner, who suggested using "typical" claim language of "a step of." Applicants request reconsideration and withdrawal of the rejection.

The sixth paragraph of Section 112 permits the elements of a claim to be written in functional terms. In the language of the statute:

An element in a claim for a combination may be expressed as a means or *step for* performing a specified function without the recital of structure, material, or *acts* in support thereof, and such claim shall be construed to cover the corresponding structure, material, or *acts* described in the specification and equivalents thereof. Emphasis added.

The clear language of the statute itself draws a distinction between functional "step for" recitations in a claim and non-functional "acts." In *O.I. Corp. v. Tekmar Co.*² the Federal Circuit

¹ The Office Action noted that all claims within the group of claims 1 – 23, 35 – 41 and 44 – 46 were included in this rejection. However, claims 6 – 21 and 23 are the only claims of that group that remain pending, hence rejection of the other claims is moot.

² 115 F.3d 1576 (Fed. Cir. 1997).

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focused on the difference in meaning under the statute between a *step-plus-function* and a corresponding *act*. The Federal Circuit observed that, under the language of the statute,

[s]tructure and material go with means, acts go with steps. Of course, as we have indicated, section 112 ¶ 6, is implicated only when means *plus function* without definite structure are present, and that is similarly true with respect to steps, that the paragraph is implicated only when steps *plus function* without acts are present.³

*Serrano v. Telular Corp.*⁴ is another case that focused on the distinction between claim limitations reciting a step-plus-function as opposed to reciting only a specific act. In that case, the Federal Circuit held that a recited step of "determining a last dialed digit" constituted a specific "act" and not a step-plus-function limitation within the scope of paragraph 6.⁵

In *Seal-Flex, Inc. v. Athletic Track & Court Construction*,⁶ Judge Rader took the opportunity in a concurring opinion to further clarify the differences between step-plus-function limitations and acts, noting,

Unlike "of," the preposition "for" colloquially signals the recitation of a function. Accordingly, the phrase "step for" generally introduced functional claim language falling under §112, ¶ 6. Thus, the phrase "step for" in a method claim raises a presumption that §112, ¶ 6 applies. . . .

...

In general terms, the "underlying function" of a method claim element corresponds to *what* that element ultimately accomplishes in relationship to what the other elements of the claim and the claims as a whole accomplish. "Acts," on the other hand, correspond to *how* the function is accomplished.⁷

These cases make it clear that interpreting method claims requires an understanding of the distinction that the court has drawn between functional limitations and non-functional limitations. Use of the phrase "step for" creates a presumption that the limitation is "functional," whereas the phrase "act of" conversely creates a presumption that the limitation is intended as a non-functional recitation. Accordingly, use of the phrase "act of" is not unclear, but on the contrary, serves as an unmistakable signal that the recitation is intended as a non-functional one, and indeed is sanctioned by both statute and the cases construing the statute.

³*Id.* at 1583.

⁴111 F.3d 1578 (Fed. Cir. 1997).

⁵*Id.* at 1583.

⁶172 F.3d 836 (Fed. Cir. 1999).

⁷*Id.* at 848-51 (Rader, J., concurring).

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In view of the foregoing, reconsideration and withdrawal of the rejection on this ground is requested.

Other rejections asserted in the Office Action under section 112, second paragraph, have been addressed by the amendments presented herein. In particular, claim 11 has been amended to remove the term "express category" which was deemed unclear. In claim 17 the term "authenticating" has been clarified by stating that the authentication of the notification is performed by "verifying whether a user account is disabled or authorized." In claim 20 the term "the user" was amended to read "a user" in order to remove the lack of sufficient antecedent basis. And claims 44 - 46, which included the phrase "in a scalable fashion" were canceled, thus obviating the objection to that phrase. Accordingly, the additional rejections based on section 112, second paragraph, have been fully met by the above amendments to the claims, and withdrawal is respectfully requested.

The computer program product claims (claims 24 - 34 and 42 - 43, now canceled) were rejected under 35 U.S.C. § 101 as non-statutory. The claims were viewed as not limited to "tangible" embodiments since applicants' specification (p. 10, lines 11 - 14) broadly describes "computer readable medium" as encompassing "carrier waves" for providing computer-executable instructions as well as optical or magnetic storage devices. Office Action ¶ 9.

New claim 48 is directed to a computer program product "comprising a physical computer readable medium containing computer-executable instructions." As discussed at the interview, this obviates the noted rejection.⁸

The only remaining rejection of record is the rejection of the claims on art. The independent claims previously pending (i.e. claims 1, 24, 35, 37, 42 and 44) were rejected under

⁸ However, applicants reserve the right to further challenge this ground of rejection by way of presenting corresponding claims which define the computer readable medium in terms consistent with the breadth of that term as provided in applicants' specification in any related application, as deemed appropriate by applicants. There are sound policy reasons why a signal or carrier wave used to provide software to users should be treated no differently for purposes of patent eligibility than a computer disc such as a CD or floppy disk. On a strictly factual basis it is highly questionable whether a signal or carrier wave is not "tangible" in any event. Simply because one cannot see or touch the medium does not change the reality that such a medium nonetheless is real and is used every day to transmit and download software just as effectively as software contained on a CD. Thus, to deny patent eligibility for such claims is to ignore the reality that such media is most certainly employed in the using and selling of software carried by such a medium, and thus denies claims to a patent owner that would otherwise provide a basis for asserting direct infringement against competitors, thereby relegating such subject matter to assertions of indirect infringement only, with no sound policy basis for doing so. To deny such computer program products of patent protection on this basis appears to be exalting form over substance.

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35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,385,644 (Devine), and the dependent claims were rejected as either anticipated by Devine or under 35 U.S.C. § 103(a) as obvious over Devine and further in view of additional teachings taken from one or more of the following references: published U.S. Application 2002/0026514 (Ellis), published U.S. Application 2003/0045273 (Pyhalammi), U.S. Patent No. 6,021,433 (Payne), published U.S. Application 2002/0083136 (Whitten), U.S. Patent No. 5,987,106 (Kitamura), and published IBM Technical Disclosure Bulletin TDB-ACC-No: NN86023759 (IBM).⁹

As discussed at the interview, Devine relates to an Internet/Intranet based reporting, presentation, and notification system for back-end servers of telecommunications service entities via the World Wide Web. Devine's object is to provide a Web-based reporting system that provides a common graphical user interface enabling both report requesting, customizing and viewing of various types of data from different server applications. Reporting is also asynchronous, meaning that the customer may request a report, and then continue using the system or other applications on the workstation while the report is processed at the back-end server. See col. 1 lines 54 – 63.

While Devine does address a message center for event notifications and report outputs, it does not address either directly or indirectly any solution to the problem solved by applicants' claimed invention – e.g. how to efficiently scale notifications to the number and variety of sources of notification and the number and variety of destinations for such notifications.

In contrast, as presented herein, applicants' claimed invention (see independent claims 47 and 48) defines a method for delivering notifications from a notification service "that scales the notifications to the number and variety of notification sources and destination sinks at the time such notifications are generated and delivered." The claimed method includes a "step for scaling the notification service in order to take into account changes in different types of notifications that may be generated at the notification sources of the network," and further defines that step as comprising acts that include

⁹ A number of these references (Devine, Ellis, Pyhalammi, Whitten and Kitamura) qualify as "prior" art, if at all, under 35 U.S.C. § 102(e). Applicants specifically reserve the right to challenge the status of these references as "prior" in time to applicants' invention, and thus remarks made herein merely assume that the references are "prior" for purposes of argument only.

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"(a) receiving at a listening component of the delivery service a notification generated by a notification source in a network format comprised of an XML document included within an HTTP post request, notification content of the notification being structured within the XML document that identifies data such as a category of notification and transform operations associated with the category that may be performed on notifications of the particular category;

(b) translating the notification into an internal processing format;

(c) forwarding the translated notification to a routing component of the notification service where categorizations of notifications that may be received are stored in an XML configuration document wherein each of the categories has associated transform operations that may be performed for that category;

(d) referencing the configuration XML document at the router component to determine a category associated with the notification, and performing at the router component one or more of the associated transform operations on the notification content of the XML document;

(e) forwarding the notification from the routing component to a delivery component of the notification service for delivery to the notification sinks of the network;

(f) changing the configuration XML document at the router by adding or deleting nodes of the XML document to add or delete different categories of notifications, and editing transform operations consistent with the added or deleted categories; and

(g) then repeating parts (a) through (e) for any subsequent notification corresponding to the changed categories of notifications."

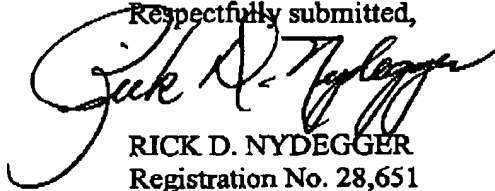
For at least the foregoing reasons, applicants invention is neither anticipated nor made obvious by Devine, either singly or in combination with any of the other secondary references or prior art of record. As noted in the interview summary, the proposed amendment thus "appears to define over the rejections of record, subject to the examiner's review of the formal amendment and then updating the search." Accordingly, entry and favorable reconsideration is respectfully requested.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

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Dated this 5 day of July, 2005.

Respectfully submitted,



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